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Claims

I claim:

1. A method of augmenting a tomographic projection image of a patient comprising the steps of:

obtaining a first sinogram data set from a patient;

reconstruct the first singgram data set into a first image;

aligning the first image to a second image so that optimal registration between the first and second image is obtained;

reprojecting the aligned image into a third sinogram data set;

extracting data from the third sinogram data set that is not available in the first sinogram data set;

augmenting the first sinogram data set with the extracted data from the previous step to obtain an augmented sinogram data set;

reconstructing the augmented sinogram data set into a third image.

2. A method of augmenting a tomographic projection image of a patient comprising the steps of:

converting a limited data sinogram to a limited data image;

fusing the limited data image to a complete image to obtain a transformed complete

20 image;

reprojecting a sinogram for the transformed complete image;

augmenting the limited data sinogram with additional data obtained from the reprojected sinogram for the transformed complete image;

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converting the augmented limited data sinogram to an image.

KJB,